

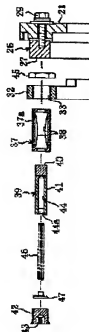
**ELECTRIC CONNECTOR AND ELECTRIC CONNECTION STRUCTURE**

**Patent number:** JP2000158376  
**Publication date:** 2000-06-13  
**Inventor:** TSUTSUMI MIKIO  
**Applicant:** B L AUTO TEC KK  
**Classification:**  
**- International:** B25J19/00; H01R39/26; B25J19/00; H01R39/00; IPC 1-7; B25J19/00; H01R39/26  
**- european:**  
**Application number:** JP19980332281 19981124  
**Priority number(s):** JP19980332281 19981124

[Report a data error here](#)

Abstract of JP2000158376

**PROBLEM TO BE SOLVED:** To stably carry a large electric current while forming an electric connector as a compact and simple structure when carrying an electric current to mutual hand side and arm side earth cables for flowing a welding earth current by respectively arranging a current collecting ring on the hand side of a rotary joint of a robot and the electric connector for carrying an electric current by contacting with the current collecting ring on the arm side. **SOLUTION:** An electric connector and an electric connection structure have a hollow cylindrical socket 37 having a contactor 36 in an inner peripheral part and a plunger 39 slidably inserted into the socket 37, a tip contact part 40 capable of contacting with the contact surface 27 of a current collecting ring 26 is arranged on the tip of the plunger 39, an outer peripheral contact part 41 for electrically continuing with the contactor 36 in the socket 37 is arranged on the outer peripheral surface, respectively, and the plunger 39 is energized by a compression spring 46 so that the tip contact part 40 projects from the socket 37. There is no need to separately arrange a bar-shaped contact point contact part in the plunger by contact electric continuity of the contactor 36 at all time with the outer peripheral contact part 41.



Data supplied from the esp@cenet database - Worldwide